

What is Claimed is:

1. A system for searching music, based upon music content that may be described by a plurality of predetermined feature vectors, comprising:

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a user interface that can receive a plurality of user requests for searching music, wherein the user requests defines a set of search parameters.

2. The system of Claim 1, wherein, one of the plural feature vectors is an emotional quality vector describing the emotional reaction to music, based upon whether music is Intense, Happy, Sad, Mellow, Romantic, Heartbreaking, Aggressive, or other emotions.

3. The system of Claim 1, wherein, one of the plural feature vectors is a vocal quality vector describing the vocal quality of music, based upon whether music includes a Smooth voice, a Powerful voice, a Great voice, a Soulful voice, or other voice qualities.

4. The system of Claim 1, wherein, one of the plural vectors is a sound quality vector describing the sound quality of music, based upon whether music includes a Strong beat, or is simple, or has a good groove, or is fast, or is speech like, or emphasizes a melody, or other sound qualities.

5. The system of Claim 1, wherein, one of the plural feature vectors is a situational quality vector describing the plural situations for which the music may be used, based on whether the music is, good for a workout, a shopping mall, a dinner party, a dance party, for slow dancing, or for studying or other situations.

6. The system of Claim 1, wherein, one of the plural feature vectors is a genre vector describing the music genre, based on whether the music is belongs to a plurality of genres including, Alternative, Blues, Country, Electronic/Dance, Folk, Gospel, Jazz, Latin, New Age, R&B, Soul, Rap, Hip-Hop, Reggae, Rock or others.

7. The system of Claim 1, wherein, one of the plural feature vectors is an ensemble vector describing the music ensemble, based on whether the music includes a female solo, male solo, female duet, male duet, mixed duet, female group, male group or instrumental.

8. The system of Claim 1, wherein, one of the plural feature vectors is an instrument vector describing the music instruments, based on whether the music includes a includes an acoustic guitar, electric guitar, bass, drums, harmonica,

- o, synthesizer, horn, or saxophone or  
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tem of Claim 1, further comprising:  
lity feature vector mixers, that allow  
level of a specific feature vector.  
stem of Claim 9, wherein the feature  
ude a genre mixer.  
stem of Claim 9, wherein the feature  
ude a voice quality mixer.  
tem of Claim 9, wherein the feature v  
emotional quality mixer.  
tem of Claim 9, wherein the feature v  
instrument mixer.  
tem of Claim 9, wherein the feature v  
oice quality mixer.  
n for searching music based upon musi  
described by a plurality of predeter  
tors, wherein a user enters search pa

into a user interface that allows a user to vary the plural levels of the plural feature vectors, comprising:

a user interface engine that receives the user requests for searching music based upon user chosen feature vector levels, wherein the user interface includes a parser for parsing the user requests.

16. The system of Claim 15, wherein the parser is a XML parser.

17. The system of Claim 15, wherein the user requests includes standard query language (SQL) calls to the user interface engine.

18. The system OF Claim 15, further comprising:

an inferential engine that performs search for music by comparing the plural feature vectors of plural music samples based upon the user entered search parameters, wherein the feature vectors describe music attributes.

19. The system of Claim 1, further comprising:

a modeling module that performs a similarity analysis by comparing feature vectors stored in a production database.

a modeling module that acquires the expert music listener and music listener responses for defining a plurality of music spaces.

22. The system of Claim 20, wherein, one of the plural music spaces is based upon a vocal quality vector describing the vocal quality of music, based upon whether music includes a Smooth voice, a Powerful voice, a Great voice, a Soulful voice, or other voice qualities.

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Strong beat, or is simple, or has a good groove, or is fast, or is speech like, or emphasizes a melody, or other sound qualities.

24. The system of Claim 20, wherein, one of the plural music spaces is based upon a situational quality vector describing the plural situations for which the music may be used, based on whether the music is, good for a workout, a shopping mall, a dinner party, a dance party, for slow dancing, or for studying or other situations.

25. The system of Claim 20, wherein, one of the plural music spaces is based upon a genre vector describing the music genre, based on whether the music is belongs to a plurality of genres including, Alternative, Blues, Country, Electronic/Dance, Folk, Gospel, Jazz, Latin, New Age, R&B, Soul, Rap, Hip-Hop, Reggae, Rock or others.

26. The system of Claim 20, wherein, one of the plural music spaces is based upon an ensemble vector describing the music ensemble, based on whether the music includes a female solo, male solo, female duet, male duet, mixed duet, female group, male group or instrumental.

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28. The system of Claim 27, wherein on of the plural music spaces is a combined music space that may include a plural combinations of the emotional quality vector, vocal quality vector, sound quality vector, ensemble quality vector, genre vector, instrument vector, or situational vector.

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